

Table 9. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

Pacific	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Energy Consumption															
Residential															
Distillate Fuel	0.025	0.027	0.028	0.026	0.025	0.025	0.024	0.024	0.024	0.023	0.023	0.022	0.022	0.021	0.021
Kerosene	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Liquefied Petroleum Gas	0.023	0.024	0.025	0.025	0.028	0.030	0.031	0.031	0.031	0.031	0.032	0.032	0.033	0.036	0.038
Petroleum Subtotal	0.050	0.054	0.055	0.054	0.055	0.058	0.058	0.058	0.057	0.058	0.057	0.057	0.058	0.060	0.062
Natural Gas	0.657	0.653	0.672	0.681	0.684	0.693	0.700	0.709	0.718	0.727	0.731	0.736	0.745	0.756	0.761
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Renewable Energy 1/	0.068	0.072	0.079	0.085	0.085	0.084	0.083	0.083	0.083	0.083	0.083	0.083	0.084	0.084	0.084
Electricity	0.464	0.470	0.478	0.487	0.493	0.504	0.512	0.521	0.529	0.539	0.546	0.554	0.563	0.572	0.578
Delivered Energy	1.239	1.249	1.284	1.308	1.318	1.340	1.354	1.372	1.388	1.407	1.417	1.432	1.450	1.473	1.486
Electricity Related Losses	0.740	0.736	0.699	0.741	0.777	0.796	0.772	0.796	0.784	0.818	0.835	0.856	0.870	0.871	0.866
Total	1.979	1.985	1.983	2.049	2.095	2.136	2.127	2.167	2.172	2.225	2.252	2.288	2.320	2.343	2.352
Commercial															
Distillate Fuel	0.037	0.040	0.041	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.038	0.038	0.039	0.039	0.039
Residual Fuel	0.002	0.002	0.001	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Kerosene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Liquefied Petroleum Gas	0.005	0.005	0.005	0.005	0.008	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.006	0.007	0.007
Motor Gasoline 2/	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Petroleum Subtotal	0.051	0.055	0.054	0.052	0.055	0.053	0.053	0.053	0.053	0.054	0.054	0.054	0.054	0.056	0.056
Natural Gas	0.366	0.348	0.352	0.344	0.342	0.346	0.350	0.355	0.362	0.368	0.373	0.387	0.395	0.402	
Coal	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Renewable Energy 3/	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Electricity	0.546	0.555	0.563	0.573	0.590	0.608	0.624	0.638	0.653	0.668	0.684	0.698	0.713	0.729	0.745
Delivered Energy	0.978	0.974	0.986	0.985	1.004	1.023	1.044	1.063	1.085	1.107	1.128	1.148	1.172	1.197	1.219
Electricity Related Losses	0.871	0.868	0.824	0.873	0.930	0.961	0.941	0.975	0.967	1.015	1.046	1.080	1.103	1.110	1.115
Total	1.849	1.842	1.811	1.858	1.933	1.984	1.985	2.038	2.052	2.122	2.173	2.228	2.274	2.307	2.335
Industrial 4/															
Distillate Fuel	0.158	0.168	0.175	0.174	0.172	0.173	0.173	0.174	0.175	0.176	0.178	0.179	0.180	0.183	0.185
Liquefied Petroleum Gas	0.035	0.033	0.031	0.032	0.060	0.064	0.067	0.070	0.074	0.078	0.079	0.086	0.092	0.102	0.111
Petrochemical Feedstocks	0.012	0.012	0.011	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Residual Fuel	0.005	0.005	0.005	0.005	0.001	0.001	0.001	0.002	0.005	0.002	0.001	0.005	0.000	0.000	0.000
Motor Gasoline 2/	0.036	0.037	0.037	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.039	0.039	0.040	0.040	0.040
Other Petroleum 5/	0.669	0.709	0.702	0.705	0.770	0.775	0.779	0.783	0.794	0.789	0.817	0.813	0.810	0.783	0.796
Petroleum Subtotal	0.915	0.964	0.961	0.965	1.053	1.063	1.071	1.082	1.100	1.098	1.127	1.136	1.135	1.121	1.146
Natural Gas	0.884	0.907	0.866	0.892	0.875	0.900	0.914	0.925	0.928	0.926	0.918	0.929	0.950	0.978	0.980
Lease and Plant Fuel 6/	0.353	0.340	0.298	0.290	0.281	0.279	0.275	0.271	0.270	0.271	0.272	0.274	0.327	0.379	0.388
Natural Gas Subtotal	1.237	1.247	1.165	1.182	1.156	1.179	1.189	1.196	1.198	1.197	1.190	1.203	1.277	1.357	1.368
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Industrial Coal	0.049	0.047	0.047	0.048	0.051	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.049	0.047	0.047	0.048	0.051	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Renewable Energy 7/	0.138	0.146	0.144	0.148	0.152	0.156	0.160	0.163	0.167	0.170	0.173	0.176	0.180	0.184	0.188
Electricity	0.302	0.302	0.309	0.313	0.320	0.323	0.326	0.329	0.334	0.337	0.341	0.345	0.349	0.353	0.359
Delivered Energy	2.640	2.706	2.625	2.656	2.732	2.772	2.796	2.821	2.849	2.851	2.881	2.910	2.991	3.065	3.110
Electricity Related Losses	0.482	0.473	0.452	0.477	0.504	0.511	0.492	0.503	0.495	0.511	0.522	0.533	0.539	0.537	0.537
Total	3.122	3.179	3.077	3.133	3.236	3.283	3.288	3.324	3.344	3.362	3.402	3.443	3.530	3.602	3.647

Table 9. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

Pacific	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Transportation															
Distillate Fuel 8/	0.673	0.702	0.712	0.732	0.754	0.772	0.792	0.812	0.831	0.849	0.864	0.878	0.893	0.909	0.926
Jet Fuel 9/	0.851	0.874	0.876	0.899	0.931	0.954	0.980	1.015	1.049	1.068	1.086	1.102	1.117	1.133	1.153
Motor Gasoline 2/	2.484	2.530	2.538	2.560	2.629	2.670	2.719	2.778	2.820	2.861	2.901	2.947	2.983	3.026	3.065
Residual Fuel	0.213	0.228	0.247	0.248	0.244	0.240	0.236	0.232	0.232	0.233	0.234	0.234	0.235	0.236	0.236
Liquefied Petroleum Gas	0.003	0.005	0.007	0.007	0.008	0.008	0.009	0.010	0.010	0.011	0.011	0.012	0.012	0.012	0.013
Other Petroleum 10/	0.021	0.028	0.029	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.029	0.029
Petroleum Subtotal	4.245	4.368	4.409	4.473	4.594	4.672	4.764	4.875	4.972	5.050	5.124	5.201	5.267	5.345	5.421
Pipeline Fuel Natural Gas	0.027	0.027	0.031	0.030	0.028	0.028	0.024	0.023	0.023	0.024	0.025	0.026	0.068	0.109	0.117
Compressed Natural Gas	0.003	0.004	0.005	0.005	0.006	0.007	0.007	0.008	0.009	0.009	0.010	0.010	0.011	0.012	0.012
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016
Delivered Energy	4.289	4.412	4.458	4.523	4.642	4.721	4.810	4.920	5.018	5.100	5.175	5.254	5.363	5.482	5.567
Electricity Related Losses	0.022	0.022	0.020	0.021	0.022	0.023	0.022	0.022	0.023	0.023	0.023	0.024	0.024	0.024	0.024
Total	4.310	4.434	4.478	4.544	4.664	4.743	4.832	4.943	5.040	5.123	5.198	5.277	5.387	5.506	5.591
Delivered Energy Consumption, All Sectors															
Distillate Fuel	0.893	0.936	0.956	0.969	0.988	1.007	1.027	1.048	1.068	1.086	1.102	1.119	1.134	1.152	1.170
Kerosene	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Jet Fuel 9/	0.851	0.874	0.876	0.899	0.931	0.954	0.980	1.015	1.049	1.068	1.086	1.102	1.117	1.133	1.153
Liquefied Petroleum Gas	0.065	0.066	0.067	0.068	0.103	0.107	0.111	0.116	0.120	0.126	0.127	0.135	0.142	0.156	0.169
Motor Gasoline 2/	2.527	2.574	2.582	2.605	2.674	2.715	2.764	2.824	2.866	2.908	2.948	2.993	3.029	3.073	3.112
Petrochemical Feedstocks	0.012	0.012	0.011	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Residual Fuel	0.220	0.236	0.253	0.255	0.247	0.243	0.239	0.236	0.240	0.237	0.237	0.242	0.238	0.239	0.239
Other Petroleum 12/	0.690	0.737	0.730	0.732	0.797	0.803	0.807	0.811	0.822	0.817	0.845	0.841	0.837	0.811	0.824
Petroleum Subtotal	5.260	5.439	5.480	5.544	5.758	5.845	5.946	6.068	6.182	6.260	6.362	6.448	6.515	6.581	6.685
Natural Gas	1.909	1.912	1.894	1.922	1.906	1.946	1.972	1.998	2.016	2.030	2.031	2.054	2.094	2.140	2.154
Lease and Plant Fuel 6/	0.353	0.340	0.298	0.290	0.281	0.279	0.275	0.271	0.270	0.271	0.272	0.274	0.327	0.379	0.388
Pipeline Natural Gas	0.027	0.027	0.031	0.030	0.028	0.028	0.024	0.023	0.023	0.024	0.025	0.026	0.068	0.109	0.117
Natural Gas Subtotal	2.290	2.279	2.223	2.243	2.215	2.253	2.271	2.291	2.309	2.326	2.329	2.355	2.488	2.628	2.659
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	0.056	0.054	0.054	0.055	0.058	0.058	0.058	0.058	0.058	0.057	0.057	0.057	0.057	0.057	0.057
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.056	0.054	0.054	0.055	0.058	0.058	0.058	0.058	0.058	0.057	0.057	0.057	0.057	0.057	0.057
Renewable Energy 13/	0.216	0.229	0.233	0.243	0.248	0.251	0.254	0.257	0.261	0.265	0.268	0.271	0.275	0.279	0.284
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	1.325	1.341	1.364	1.387	1.417	1.450	1.476	1.502	1.531	1.559	1.586	1.612	1.641	1.670	1.699
Delivered Energy	9.147	9.342	9.354	9.472	9.696	9.856	10.005	10.176	10.340	10.466	10.600	10.743	10.975	11.216	11.383
Electricity Related Losses	2.114	2.098	1.996	2.112	2.233	2.290	2.228	2.296	2.268	2.366	2.425	2.494	2.536	2.542	2.542
Total	11.261	11.440	11.349	11.584	11.929	12.147	12.232	12.472	12.608	12.832	13.026	13.236	13.511	13.758	13.925
Electric Power 14/															
Distillate Fuel	0.007	0.005	0.016	0.014	0.015	0.014	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.015
Residual Fuel	0.032	0.032	0.091	0.093	0.093	0.095	0.097	0.098	0.100	0.105	0.107	0.114	0.114	0.116	0.118
Petroleum Subtotal	0.039	0.037	0.106	0.108	0.108	0.109	0.111	0.113	0.115	0.120	0.122	0.130	0.130	0.132	0.133
Natural Gas	0.857	0.921	0.767	0.686	0.699	0.761	0.690	0.701	0.671	0.752	0.803	0.843	0.881	0.873	0.859
Steam Coal	0.204	0.192	0.200	0.200	0.202	0.205	0.207	0.208	0.206	0.209	0.210	0.210	0.211	0.212	0.211
Nuclear Power	0.440	0.455	0.446	0.453	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
Renewable Energy/Other 15/	1.892	1.840	1.850	2.060	2.192	2.219	2.251	2.334	2.365	2.402	2.434	2.481	2.513	2.554	2.594
Electricity Imports	0.007	-0.006	-0.011	-0.008	-0.005	-0.008	-0.010	-0.011	-0.012	-0.012	-0.011	-0.011	-0.012	-0.011	-0.009
Total	3.439	3.439	3.359	3.499	3.651	3.740	3.703	3.799	3.799	3.925	4.011	4.106	4.177	4.213	4.241

Table 9. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

Pacific	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Energy Consumption															
Distillate Fuel	0.900	0.941	0.972	0.984	1.003	1.021	1.041	1.063	1.083	1.101	1.118	1.134	1.150	1.168	1.185
Kerosene	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Jet Fuel 9/	0.851	0.874	0.876	0.899	0.931	0.954	0.980	1.015	1.049	1.068	1.086	1.102	1.117	1.133	1.153
Liquefied Petroleum Gas	0.065	0.066	0.067	0.068	0.103	0.107	0.111	0.116	0.120	0.126	0.127	0.135	0.142	0.156	0.169
Motor Gasoline 2/	2.527	2.574	2.582	2.605	2.674	2.715	2.764	2.824	2.866	2.908	2.948	2.993	3.029	3.073	3.112
Petrochemical Feedstocks	0.012	0.012	0.011	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Residual Fuel	0.252	0.268	0.344	0.349	0.340	0.338	0.336	0.334	0.340	0.342	0.344	0.356	0.352	0.355	0.357
Other Petroleum 12/	0.690	0.737	0.730	0.732	0.797	0.803	0.807	0.811	0.822	0.817	0.845	0.841	0.837	0.811	0.824
Petroleum Subtotal	5.299	5.477	5.586	5.652	5.866	5.955	6.057	6.181	6.297	6.380	6.484	6.578	6.645	6.713	6.818
Natural Gas	2.766	2.832	2.662	2.608	2.605	2.707	2.663	2.698	2.687	2.782	2.834	2.897	2.975	3.013	3.013
Lease and Plant Fuel 6/	0.353	0.340	0.298	0.290	0.281	0.279	0.275	0.271	0.270	0.271	0.272	0.274	0.327	0.379	0.388
Pipeline Natural Gas	0.027	0.027	0.031	0.030	0.028	0.028	0.024	0.023	0.023	0.024	0.025	0.026	0.068	0.109	0.117
Natural Gas Subtotal	3.147	3.199	2.991	2.929	2.915	3.013	2.962	2.992	2.980	3.078	3.131	3.197	3.370	3.501	3.518
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	0.260	0.246	0.255	0.255	0.260	0.263	0.265	0.266	0.264	0.267	0.267	0.267	0.268	0.269	0.268
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.260	0.246	0.255	0.255	0.260	0.263	0.265	0.266	0.264	0.267	0.267	0.267	0.268	0.269	0.268
Nuclear Power	0.440	0.455	0.446	0.453	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
Renewable Energy 16/	2.109	2.069	2.083	2.303	2.440	2.470	2.504	2.591	2.626	2.666	2.701	2.751	2.787	2.832	2.876
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.007	-0.006	-0.011	-0.008	-0.005	-0.008	-0.010	-0.011	-0.012	-0.012	-0.011	-0.011	-0.012	-0.011	-0.009
Total	11.261	11.440	11.349	11.584	11.929	12.147	12.232	12.472	12.608	12.832	13.026	13.236	13.511	13.758	13.925

Energy Use and Related Statistics

Delivered Energy Use	9.147	9.342	9.354	9.472	9.696	9.856	10.005	10.176	10.340	10.466	10.600	10.743	10.975	11.216	11.383
Total Energy Use	11.261	11.440	11.349	11.584	11.929	12.147	12.232	12.472	12.608	12.832	13.026	13.236	13.511	13.758	13.925
Population (millions)	47.152	47.682	48.209	48.737	49.265	49.791	50.324	50.860	51.401	51.951	52.509	53.073	53.642	54.215	54.790
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869

Table 9. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

Pacific	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Energy Consumption														
Residential														
Distillate Fuel	0.020	0.020	0.019	0.018	0.018	0.017	0.016	0.016	0.015	0.015	0.014	0.013	0.013	-2.8%
Kerosene	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.1%
Liquefied Petroleum Gas	0.040	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.043	0.043	2.2%
Petroleum Subtotal	0.063	0.064	0.064	0.063	0.061	0.061	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.3%
Natural Gas	0.766	0.770	0.776	0.778	0.782	0.786	0.792	0.793	0.797	0.802	0.808	0.811	0.814	0.9%
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-0.2%
Renewable Energy 1/	0.085	0.085	0.086	0.086	0.086	0.086	0.087	0.087	0.088	0.088	0.089	0.089	0.089	0.8%
Electricity	0.586	0.594	0.603	0.608	0.615	0.623	0.632	0.638	0.646	0.654	0.663	0.669	0.677	1.4%
Delivered Energy	1.501	1.513	1.529	1.535	1.545	1.557	1.572	1.579	1.591	1.603	1.620	1.628	1.639	1.0%
Electricity Related Losses	0.873	0.894	0.920	0.937	0.945	0.956	0.970	0.966	0.964	0.957	0.953	0.943	0.935	0.9%
Total	2.374	2.407	2.450	2.473	2.490	2.513	2.542	2.545	2.554	2.560	2.572	2.571	2.574	1.0%
Commercial														
Distillate Fuel	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.041	0.041	0.041	0.1%
Residual Fuel	0.003	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.7%
Kerosene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0%
Liquefied Petroleum Gas	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.7%
Motor Gasoline 2/	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.2%
Petroleum Subtotal	0.055	0.055	0.056	0.055	0.056	0.056	0.056	0.056	0.057	0.057	0.057	0.057	0.058	0.2%
Natural Gas	0.407	0.411	0.416	0.422	0.427	0.433	0.438	0.443	0.448	0.454	0.459	0.465	0.467	1.1%
Coal	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.0%
Renewable Energy 3/	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.0%
Electricity	0.761	0.776	0.791	0.806	0.823	0.841	0.858	0.875	0.893	0.912	0.930	0.949	0.968	2.2%
Delivered Energy	1.240	1.259	1.280	1.300	1.323	1.346	1.369	1.391	1.415	1.439	1.463	1.488	1.509	1.7%
Electricity Related Losses	1.132	1.168	1.207	1.243	1.264	1.291	1.316	1.325	1.333	1.335	1.336	1.337	1.337	1.7%
Total	2.372	2.427	2.487	2.543	2.586	2.637	2.685	2.717	2.748	2.773	2.799	2.825	2.846	1.7%
Industrial 4/														
Distillate Fuel	0.187	0.189	0.191	0.193	0.195	0.197	0.200	0.203	0.207	0.210	0.213	0.217	0.221	1.1%
Liquefied Petroleum Gas	0.119	0.113	0.112	0.115	0.120	0.119	0.122	0.119	0.121	0.122	0.123	0.124	0.125	5.3%
Petrochemical Feedstocks	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.0%
Residual Fuel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	-8.6%
Motor Gasoline 2/	0.040	0.040	0.041	0.041	0.041	0.041	0.042	0.042	0.042	0.043	0.043	0.043	0.043	0.6%
Other Petroleum 5/	0.821	0.810	0.821	0.820	0.829	0.834	0.833	0.846	0.855	0.861	0.866	0.872	0.879	0.8%
Petroleum Subtotal	1.181	1.166	1.177	1.182	1.198	1.205	1.210	1.223	1.238	1.248	1.258	1.269	1.281	1.1%
Natural Gas	0.976	1.011	1.015	1.029	1.035	1.047	1.063	1.071	1.083	1.095	1.108	1.122	1.134	0.9%
Lease and Plant Fuel 6/	0.398	0.395	0.392	0.385	0.379	0.373	0.366	0.360	0.355	0.351	0.347	0.343	0.339	0.0%
Natural Gas Subtotal	1.374	1.407	1.407	1.414	1.414	1.420	1.429	1.431	1.438	1.446	1.455	1.465	1.473	0.6%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Industrial Coal	0.051	0.051	0.051	0.051	0.051	0.051	0.052	0.052	0.052	0.052	0.053	0.053	0.053	0.5%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.051	0.051	0.051	0.051	0.051	0.051	0.052	0.052	0.052	0.052	0.053	0.053	0.053	0.5%
Renewable Energy 7/	0.192	0.197	0.201	0.206	0.211	0.216	0.221	0.226	0.232	0.238	0.244	0.251	0.257	2.2%
Electricity	0.366	0.371	0.375	0.380	0.386	0.391	0.397	0.404	0.412	0.419	0.426	0.433	0.441	1.5%
Delivered Energy	3.165	3.191	3.211	3.233	3.259	3.283	3.309	3.337	3.372	3.404	3.436	3.471	3.505	1.0%
Electricity Related Losses	0.545	0.558	0.573	0.586	0.593	0.601	0.609	0.612	0.614	0.613	0.611	0.611	0.609	1.0%
Total	3.710	3.748	3.784	3.818	3.852	3.884	3.918	3.949	3.986	4.017	4.047	4.082	4.115	1.0%

Table 9. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Pacific														
Transportation														
Distillate Fuel 8/	0.943	0.960	0.978	0.998	1.018	1.040	1.063	1.086	1.112	1.139	1.167	1.195	1.225	2.2%
Jet Fuel 9/	1.169	1.183	1.187	1.192	1.197	1.202	1.207	1.212	1.218	1.226	1.235	1.246	1.260	1.4%
Motor Gasoline 2/	3.111	3.157	3.200	3.238	3.276	3.316	3.358	3.401	3.446	3.492	3.538	3.584	3.630	1.4%
Residual Fuel	0.237	0.237	0.238	0.238	0.239	0.239	0.240	0.240	0.240	0.241	0.241	0.242	0.242	0.2%
Liquefied Petroleum Gas	0.013	0.013	0.014	0.015	0.015	0.015	0.016	0.016	0.016	0.017	0.017	0.017	0.018	5.4%
Other Petroleum 10/	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.030	0.030	0.030	0.030	0.2%
Petroleum Subtotal	5.502	5.579	5.646	5.709	5.774	5.841	5.912	5.985	6.063	6.144	6.227	6.314	6.405	1.5%
Pipeline Fuel Natural Gas	0.125	0.125	0.125	0.124	0.124	0.124	0.124	0.124	0.123	0.123	0.123	0.123	0.123	6.0%
Compressed Natural Gas	0.012	0.013	0.013	0.014	0.014	0.014	0.015	0.015	0.015	0.016	0.016	0.016	0.016	5.7%
Renewable Energy (E85) 11/	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	6.7%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	N/A
Electricity	0.016	0.016	0.017	0.017	0.017	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.018	1.1%
Delivered Energy	5.657	5.735	5.801	5.865	5.929	5.998	6.069	6.142	6.220	6.302	6.386	6.474	6.564	1.5%
Electricity Related Losses	0.024	0.025	0.025	0.026	0.026	0.026	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.7%
Total	5.681	5.759	5.827	5.891	5.955	6.024	6.095	6.169	6.247	6.328	6.412	6.499	6.590	1.5%
Delivered Energy Consumption, All Sectors														
Distillate Fuel	1.189	1.208	1.227	1.248	1.271	1.294	1.319	1.346	1.375	1.405	1.435	1.466	1.499	1.8%
Kerosene	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.1%
Jet Fuel 9/	1.169	1.183	1.187	1.192	1.197	1.202	1.207	1.212	1.218	1.226	1.235	1.246	1.260	1.4%
Liquefied Petroleum Gas	0.178	0.173	0.173	0.177	0.182	0.182	0.184	0.181	0.184	0.186	0.188	0.189	0.191	4.1%
Motor Gasoline 2/	3.159	3.204	3.248	3.286	3.324	3.365	3.407	3.451	3.496	3.542	3.588	3.634	3.681	1.4%
Petrochemical Feedstocks	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.0%
Residual Fuel	0.240	0.240	0.241	0.241	0.242	0.242	0.243	0.243	0.244	0.244	0.245	0.245	0.245	0.2%
Other Petroleum 12/	0.849	0.838	0.849	0.848	0.857	0.862	0.862	0.875	0.884	0.890	0.895	0.902	0.908	0.8%
Petroleum Subtotal	6.802	6.864	6.943	7.009	7.089	7.163	7.238	7.324	7.416	7.508	7.601	7.699	7.801	1.4%
Natural Gas	2.162	2.205	2.221	2.242	2.258	2.279	2.307	2.322	2.344	2.366	2.392	2.413	2.433	0.9%
Lease and Plant Fuel 6/	0.398	0.395	0.392	0.385	0.379	0.373	0.366	0.360	0.355	0.351	0.347	0.343	0.339	0.0%
Pipeline Natural Gas	0.125	0.125	0.125	0.124	0.124	0.124	0.124	0.124	0.123	0.123	0.123	0.123	0.123	6.0%
Natural Gas Subtotal	2.685	2.725	2.737	2.751	2.761	2.776	2.797	2.806	2.822	2.840	2.862	2.880	2.894	0.9%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	0.058	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.060	0.060	0.060	0.061	0.061	0.4%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.058	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.060	0.060	0.061	0.061	0.061	0.4%
Renewable Energy 13/	0.289	0.293	0.298	0.303	0.308	0.314	0.320	0.325	0.332	0.338	0.345	0.351	0.358	1.7%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	N/A
Electricity	1.730	1.757	1.786	1.811	1.841	1.872	1.905	1.935	1.969	2.002	2.037	2.069	2.104	1.7%
Delivered Energy	11.563	11.697	11.822	11.933	12.057	12.184	12.319	12.450	12.598	12.748	12.905	13.060	13.218	1.3%
Electricity Related Losses	2.574	2.644	2.725	2.791	2.827	2.874	2.922	2.930	2.937	2.931	2.926	2.917	2.906	1.3%
Total	14.138	14.341	14.547	14.725	14.884	15.058	15.240	15.380	15.535	15.679	15.831	15.977	16.125	1.3%
Electric Power 14/														
Distillate Fuel	0.015	0.016	0.017	0.017	0.017	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.018	5.0%
Residual Fuel	0.120	0.122	0.124	0.125	0.127	0.130	0.132	0.134	0.136	0.138	0.141	0.143	0.145	6.0%
Petroleum Subtotal	0.135	0.138	0.141	0.143	0.144	0.147	0.149	0.151	0.153	0.156	0.158	0.160	0.163	5.9%
Natural Gas	0.849	0.865	0.824	0.801	0.760	0.759	0.748	0.726	0.698	0.670	0.659	0.659	0.660	-1.3%
Steam Coal	0.211	0.212	0.247	0.278	0.284	0.284	0.288	0.288	0.289	0.289	0.286	0.285	0.285	1.5%
Nuclear Power	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.0%
Renewable Energy/Other 15/	2.664	2.738	2.853	2.935	3.032	3.111	3.195	3.253	3.319	3.372	3.413	3.436	3.455	2.5%
Electricity Imports	-0.009	-0.007	-0.007	-0.007	-0.007	-0.008	-0.007	-0.007	-0.007	-0.007	-0.007	-0.007	-0.007	0.9%
Total	4.304	4.401	4.511	4.603	4.668	4.746	4.827	4.865	4.906	4.933	4.963	4.987	5.010	1.5%

Table 9. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

Pacific	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Total Energy Consumption														
Distillate Fuel	1.204	1.225	1.244	1.266	1.288	1.311	1.337	1.363	1.392	1.422	1.452	1.484	1.517	1.9%
Kerosene	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.1%
Jet Fuel 9/	1.169	1.183	1.187	1.192	1.197	1.202	1.207	1.212	1.218	1.226	1.235	1.246	1.260	1.4%
Liquefied Petroleum Gas	0.178	0.173	0.173	0.177	0.182	0.182	0.184	0.181	0.184	0.186	0.188	0.189	0.191	4.1%
Motor Gasoline 2/	3.159	3.204	3.248	3.286	3.324	3.365	3.407	3.451	3.496	3.542	3.588	3.634	3.681	1.4%
Petrochemical Feedstocks	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.0%
Residual Fuel	0.360	0.362	0.365	0.367	0.369	0.372	0.375	0.377	0.380	0.382	0.385	0.387	0.390	1.5%
Other Petroleum 12/	0.849	0.838	0.849	0.848	0.857	0.862	0.862	0.875	0.884	0.890	0.895	0.902	0.908	0.8%
Petroleum Subtotal	6.937	7.002	7.083	7.152	7.233	7.310	7.387	7.475	7.570	7.664	7.759	7.860	7.964	1.5%
Natural Gas	3.011	3.070	3.045	3.043	3.019	3.039	3.055	3.049	3.043	3.036	3.051	3.073	3.094	0.3%
Lease and Plant Fuel 6/	0.398	0.395	0.392	0.385	0.379	0.373	0.366	0.360	0.355	0.351	0.347	0.343	0.339	0.0%
Pipeline Natural Gas	0.125	0.125	0.125	0.124	0.124	0.124	0.124	0.124	0.123	0.123	0.123	0.123	0.123	6.0%
Natural Gas Subtotal	3.534	3.591	3.561	3.552	3.521	3.536	3.545	3.533	3.521	3.511	3.521	3.540	3.555	0.4%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	0.270	0.270	0.305	0.336	0.343	0.343	0.348	0.348	0.349	0.349	0.346	0.345	0.346	1.3%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.270	0.270	0.305	0.336	0.343	0.343	0.348	0.348	0.349	0.349	0.346	0.345	0.346	1.3%
Nuclear Power	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.0%
Renewable Energy 16/	2.951	3.031	3.151	3.237	3.340	3.424	3.514	3.577	3.649	3.709	3.757	3.786	3.812	2.4%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	N/A
Electricity Imports	-0.009	-0.007	-0.007	-0.007	-0.007	-0.008	-0.007	-0.007	-0.007	-0.007	-0.007	-0.007	-0.007	0.9%
Total	14.138	14.341	14.547	14.725	14.884	15.058	15.240	15.380	15.535	15.679	15.831	15.977	16.125	1.3%

Energy Use and Related Statistics

Delivered Energy Use	11.563	11.697	11.822	11.933	12.057	12.184	12.319	12.450	12.598	12.748	12.905	13.060	13.218	1.3%
Total Energy Use	14.138	14.341	14.547	14.725	14.884	15.058	15.240	15.380	15.535	15.679	15.831	15.977	16.125	1.3%
Population (millions)	55.369	55.950	56.533	57.121	57.718	58.323	58.936	59.558	60.182	60.809	61.439	62.072	62.710	1.1%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 9. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)
Pacific

- 1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.
- 2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.
- 3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.
- 4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
- 5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.
- 6/ Represents natural gas used in the field gathering and processing plant machinery.
- 7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.
- 8/ Diesel fuel for on- and off-road use.
- 9/ Includes only kerosene type.
- 10/ Includes aviation gasoline and lubricants.
- 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
- 12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.
- 13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.
- 14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.
- 15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.
- 16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.
- Btu = British thermal unit.
- N/A = Not applicable.
- Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.
- Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.